



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,693	11/17/2000	Nader F. Mir	UKRF-104A	8557
28304	7590	06/15/2005	EXAMINER	
JEAN M. MACHELEDT 501 SKYSAIL LANE SUITE B100 FORT COLLINS, CO 80525-3133			STEVENS, ROBERTA A	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/715,693

[illegible]

MIR, NADER F.

Examiner

Roberta A. Shand

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,14 and 20 is/are rejected.
- 7) ☒ Claim(s) 3-13, 15-19, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 14 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Dantu (U.S. 6532088 B1).

3. Regarding claim 1, Dantu teaches a network (figs. 3 and 6) for routing a plurality of data segments containing address information, comprising: a first second and third switch element (300, 312, 316, 320) each comprising a respective external input for routing data segments into the network and a respective external output (fig. 4) for routing data segment out of the network; a first bi-directional coupling between the first and second switch elements, a second bi-directional coupling between the first and third switch elements, and a third bi-directional coupling between the second and third switch elements (fig. 4 shows a network node (switching element) where it is depicted bi-directional lines from the node interface to the ring, this figure represents each node in the ring); and a first controller (figure 4, 400) for interrogating the address information of each of the segments inbound into the first switch element, any of the inbound data segments received by the first switch element to be directed out along a selected exit path way; whereby the exit pathway for any inbound data segments received is selected

Art Unit: 2665

according to the address information of the inbound data segment, and if a contention exists for the exit pathway, further according to a priority designator of the data (col. 9, line 37 – col. 11, line 39): the exit pathway to be selected from the group consisting of: if the first switch element is an outbound destination for the data, the first external output and one of the bi-directional couplings in communication with the first switch element (fig. 10).

4. Regarding claim 2, Dantu teaches (figs. 4) the external input is in direct communication with a first input-port processor; the external output is in direct communication with a first output-port processor; each bi-directional coupling comprises an optical fiber link; and any of the data that arrive at the first input-port processor, do so as optical signals (col. 9, line 37 – col. 11, line 39).

5. Regarding claim 14, Dantu teaches (figs. 3 and 6) a method for routing a plurality of data segments through a network having first second and third switch elements (300, 312, 316, 320), comprising: providing a first bi-directional coupling between the first and second switch elements, a second bi-directional coupling between the first and third switch elements, and a third bi-directional coupling between the second and third switch elements; interrogating an address information of each of the data segments routed by way of a respective external input (fig. 4); and selecting exit pathway for any inbound data segments received address information of the inbound data segment (col. 9, line 37 – col. 11, line 39), and if a contention exists for the exit pathway, further according to a priority designator of the data: the exit pathway to be selected from the group consisting of: if the first switch element is an outbound destination for

Art Unit: 2665

the data, the first external output and one of the bi-directional couplings in communication with the first switch element (fig. 10)

6. Regarding claim 20, Dantu teaches (figs. 3 and 6) a computer readable program code on a computer readable storage medium for routing a plurality of data segments through a network having first, second and third switch elements (300, 312, 316, 320, comprising: a first program sub-code for interrogating an address information of each of the data segments routed by way of a respective external input (fig. 4); and selecting exit pathway for any inbound data segments received address information of the inbound data segment, whereby a bi-directional coupling is provided between the first and second switch elements, between the first and third switch elements, and between the second and third switch elements; and a second program sub-code for selecting exit pathway for any inbound data segments received address information of the inbound data segment (col. 9, line 37 – col. 11, line 39), and if a contention exists for the exit pathway, further according to a priority designator of the data: the exit pathway to be selected from the group consisting of: if the first switch element is an outbound destination for the data, the first external output and one of the bi-directional couplings in communication with the first switch element (fig. 10).

Allowable Subject Matter

7. Claims 3-13, 15-19, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed February 15, 2005 have been fully considered but they are not persuasive. Applicant argues that Dantu does not teach first bi-directional coupling between the first and second switch elements, a second bi-directional coupling between the first and third switch elements, and a third bi-directional coupling between the second and third switch elements. Applicant is directed to figure 4, of Dantu where it is depicted a network node (switching element) and bi-directional lines (couplings) from the node interface to the ring, this figure represents each node in the ring.

9. Applicant also argues that Dantu does not teach the possibility of having an optical signal travel along alternate routes. Applicant is directed to figure 4, where as mentioned above shows bi-directional lines (couplings) which imply that traffic can travel in either direction of the ring therefore giving the traffic incase of failure two directions (two options) to flow along the protection path according to the routing table.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2665

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberta A Shand
Examiner
Art Unit 2665



STEVEN NGUYEN
PRIMARY EXAMINER